

Application No. 10/710,713
Response to Restriction Requirement mailed February 2, 2006
Attorney Docket No. R-03-1405

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Original) A temperature controlled hydraulic fluid supply circuit comprising:
a first hydraulic fluid reservoir having an initial hydraulic fluid;
a first temperature controlled housing;
a second hydraulic fluid reservoir fluidically coupled to said first hydraulic fluid reservoir, residing within said first temperature controlled housing, and having a controlled hydraulic fluid that is supplied to at least one test device; and
a circulation device circulating a temperature altering fluid through said first temperature controlled housing and adjusting a temperature of said controlled hydraulic fluid.
2. (Original) A circuit as in claim 1 further comprising a plurality of hydraulic fluid control valves controlling flow of said initial hydraulic fluid and said controlled hydraulic fluid and supplying said controlled hydraulic fluid to said at least one test device.
3. (Original) A circuit as in claim 2 wherein said plurality of hydraulic fluid control valves separate said initial fluid from said controlled fluid.
4. (Original) A circuit as in claim 1 further comprising a second temperature controlled housing containing said at least one test device therein.
5. (Original) A circuit as in claim 4 wherein circulation device circulates said temperature altering fluid through said second temperature controlled housing and adjusts temperature of said at least one test device.
6. (Original) A circuit as in claim 1 wherein said second hydraulic fluid reservoir is in the form of a cylinder housing having a hydraulic piston.
7. (Original) A circuit as in claim 1 wherein said hydraulic fluid test circuit comprises at least one configuration selected from a fill configuration, a use configuration, and a bypass configuration.

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8. (Original) A circuit as in claim 1 wherein said temperature altering fluid is such to perform at least one test of said at least one test device selected from a cold test and a warm test.

9. (Original) A hydraulic device test system comprising:
a hydraulic fluid test circuit comprising;
a first hydraulic fluid reservoir having an initial hydraulic fluid;
a first temperature controlled housing;
a second hydraulic fluid reservoir fluidically coupled to said first hydraulic fluid reservoir, residing within said temperature controlled housing, and having a controlled hydraulic fluid;
a circulation device circulating a temperature altering fluid through said first temperature controlled housing and adjusting temperature of said controlled hydraulic fluid;
and
a plurality of hydraulic fluid control valves controlling flow of said initial hydraulic fluid and said controlled hydraulic fluid and supplying said controlled hydraulic fluid to at least one test device.

10. (Original) A test system as in claim 9 wherein said temperature altering fluid is in the form of a liquid or a gas.

11. (Original) A test system as in claim 9 wherein said first temperature controlled housing comprises:
an air inlet; and
an air outlet.

12. (Original) A test system as in claim 9 further comprising at least one pressure sensor detecting at least one fluid pressure within said hydraulic fluid test circuit.

13. (Original) A test system as in claim 12 further comprising a controller coupled to said at least one pressure sensor and indicating said at least one fluid pressure.

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14. (Original) A test system as in claim 9 wherein said at least one pressure sensor detects pressure of at least one output of said first hydraulic fluid reservoir and said second hydraulic fluid reservoir.

15. (Original) A test system as in claim 9 further comprising at least one temperature sensor detecting at least one temperature of at least one fluid within said hydraulic fluid test circuit.

16. (Original) A test system as in claim 15 further comprising a controller coupled to said at least one temperature sensor and indicating said at least one temperature.

17. (Original) A test system as in claim 16 wherein said controller adjusts said temperature adjusting fluid in response to said at least one temperature.

18. (Original) A test system as in claim 15 wherein said at least one temperature sensor detects temperature of at least one of said first hydraulic fluid reservoir, said first temperature controlled housing, said second hydraulic fluid reservoir, said at least one test device, an output of said second hydraulic fluid reservoir, a second temperature controlled housing, said initial hydraulic fluid, said controlled hydraulic fluid, and said temperature altering fluid.

19. (Original) A test system as in claim 9 further comprising a second temperature controlled housing containing said at least one test device therein.

20. (Original) A test system as in claim 19 wherein said circulation device circulates said temperature altering fluid through said second temperature controlled housing and adjusts temperature of said at least one test device.

21. (Original) A test system as in claim 19 wherein said second temperature controlled housing is fluidically coupled to said first temperature controlled housing.

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22. (Original) A test system as in claim 19 wherein said first temperature controlled housing, said second temperature controlled housing, and said circulation device are in series and form a single continuous fluidic circuit.

23. (Original) A test system as in claim 9 wherein said second hydraulic fluid reservoir is in the form of a cylinder housing having a hydraulic piston.

24. (Original) A test system as in claim 9 wherein said second hydraulic fluid reservoir comprises:

an output side; and
a pressure side.

25. (Original) A test system as in claim 24 wherein said output side receives said initial hydraulic fluid when said hydraulic fluid test circuit is operating in a fill configuration.

26. (Original) A test system as in claim 24 wherein said pressure side receives said initial hydraulic fluid when said hydraulic fluid test circuit is operating in a use configuration.

27. (Original) A test system as in claim 24 wherein neither said output side nor said pressure side receive said initial hydraulic fluid when said hydraulic fluid test circuit is operating in a bypass configuration.

28. (Original) A test system as in claim 24 wherein said at least one hydraulic fluid control valve comprises:

a fill valve controlling flow of said initial hydraulic fluid into said output side; and
a pressure valve controlling flow of said initial hydraulic fluid into said pressure side.

29. (Original) A test system as in claim 9 wherein said at least one hydraulic fluid control valve comprises:

an inlet valve controlling flow of said initial hydraulic fluid out of said first hydraulic fluid reservoir;
a return valve controlling flow of said initial hydraulic fluid out of said second

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hydraulic fluid reservoir; and

an output valve controlling flow of said controlled hydraulic fluid to said at least one test device.

30. (Original) A test system as in claim 9 wherein said temperature altering fluid is such to perform at least one test of said at least one test device selected from a cold test and a warm test.

31. (Original) A hydraulic device test system comprising:
a hydraulic fluid test circuit comprising;

a first hydraulic fluid reservoir having an initial hydraulic fluid;

a first temperature controlled housing;

a second hydraulic fluid reservoir fluidically coupled to said first hydraulic fluid reservoir, residing within said temperature controlled housing, and having a controlled hydraulic fluid;

a circulation device circulating a temperature altering fluid through said first temperature controlled housing and adjusting temperature of said controlled hydraulic fluid; and

a plurality of hydraulic fluid control valves controlling flow of said initial hydraulic fluid and said controlled hydraulic fluid and supplying said controlled hydraulic fluid to at least one test device;

at least one temperature sensor coupled to said hydraulic fluid test circuit and generating at least one temperature signal; and

a controller coupled to said hydraulic fluid test circuit and said at least one sensor and adjusting at least one of said initial hydraulic fluid, said controlled hydraulic fluid, temperature altering fluid in response to said at least one temperature signal.

32. (Original) A test system as in claim 31 wherein said controller signals said circulating device to alter temperature of said controlled hydraulic fluid in response to said at least one temperature signal.

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33. (Original) A test system as in claim 31 further comprising a second temperature controlled housing containing said at least one test device, said controller signaling said circulating device to alter temperature within said second temperature controlled housing in response to said at least one temperature signal.

34. (Canceled)

35. (Canceled)

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Canceled)